

Tehničke specifikacije Performance Parameters

Detailed Information:

Major Features:

 $\cdot$  Bus and power supply isolation, high reliability, good anti-jamming capability

· 16bit sampling precision, hardware filter technique, more accurate and stable measure

d

values.

 $\cdot$  Reverse protection and surge absorption function of its power supply makes it adapta ble to

severe industrial environment.

Use Standard

- $\cdot$  use shielded twisted pair to transmit signals and must have one end earthed
- $\cdot$  When the system is in a good state, the earthed end must be connected to the ground

wire, otherwise it is not earthed.

- $\cdot$  it is suggested to use Trust PLC library function to read data from weigh module
- $\cdot$  Calibration needed when replacing modules

When the system is dual-

channeled and has one transducer connected, another transducer should be short-

circuited to avoid alarm or shift to uni-channel mode.

| Specification          | CTS7 231-7WB32                                       |  |
|------------------------|--|--|
| Power Consumption      | 5W   |  |
| Power Consumption      |  |  |
| +5VDC consumed current | < 140mA  |  |
| L+ consumed current    | <100mA   |  |
| L+ Coil voltage range  | 20.4 - 28.8VDC                                       |  |
| LED indicator          | 24 VDC Power Supply Good: ON = no fault, OFF = no po |  |
|                        | wer ;  |  |

|                                   | SF: ON=module fault, Blink=input signal error, OF |  |
|-----------------------------------|---|--|
|                                   | F=normal;   |  |
| Input type                        | Strain gauge , 4 or 6wire mode of connection      |  |
| Input range                       | 0~1mV/V   |  |
|                                   | 0~2mV/V   |  |
|                                   | 0~3mV/V   |  |
|                                   | 0~4mV/V   |  |
| Input point                       | 2AI   |  |
| Isolation Features                |   |  |
| field side to logic circuit       | 500VAC  |  |
| Field side to 24VDC               | 500VAC  |  |
| 24V to logic circuit              | 500VAC  |  |
| Common-mode input range (         |   |  |
| from input channel to input chann | 0   |  |
| el )                              |   |  |
| Common mode rejection             | >120dB@120VAC                                     |  |
| Input Resolution                  |   |  |
| temperature coefficient null poin | ≤±0.1uV/K   |  |
| t                                 |   |  |
| Principle of measurement          | Sigma-Delta                                       |  |
| length of conducting line to tran | Mavimum E00 matars                                |  |
| sducer                            | iviaximum 500 meters                              |  |
| Noise suppression                 | 85db@50Hz/60Hz                                    |  |
| Data word format                  | Voltage : 0 to + 32000                            |  |
| Resolution                        | 16 bits   |  |
| Intrinsic error                   | 0.05%Fs   |  |
| Repeatability                     | 0.1%Fs  |  |

**Related Information** 

Library function of weigh module TrustPLC 231-7WB32.

Terminal Connection Weighing module which is a measuring module of highprecision requires reliable measuring low signal level (about 1.5uV). Thus, to make sure it works, it is important to choose a ppropriate assembly and cable connection.

While connect weighing transducer, following rules should be obeyed.

 $\cdot$  If more than one transducer is going to be connected (if they are weighing transduc ers,

they must be parallel connected), one junction box must be used. If the distance be tween

weighing transducer and module or between weighing transducer and junction bo x is

longer than the length of available cable of weighing transducer, a dedicated exten sion box

Should be used.

 $\cdot$  Shield of cable should always reach as far as to cable gland of junction box or extension box.

 $\cdot$  Use stranded wire to connect cable in certain circuit and keep it shielded.

---transducer wire SEN+/SEN- ;

---measuring voltage coil SIG+/SIG- ;

---supply voltage coil EXC+/EXC-.

·Shielded wire must be joint with shield connector.

1. Four- Wire connection



2. When connect four-

wire transducer, please make sure that EXC with SENS, EXC with SENS- are short

- 3. circuited. Otherwise, the module may not work normally.
- 4. 2、Six-wire connection



5. 3、Module Connection Diagram



- 6. DIP Switch Setting
- 7.

| DIP Switch Configuration  |           |  |
|---------------------------|-----------|--|
| Switch 1、2、3、4、5、<br>6    | setting   | function                                       |
| SW1、2                     | 01        | Choose 1mV/V transducer                        |
|                           | 00        | Choose 2mV/V transducer<br>(default)           |
|                           | 10        | Choose 3mV/V transducer                        |
|                           | 11        | Choose 4mV/V transducer                        |
| SW3                       | 0         | Choose dual channel working<br>model (default) |
|                           | 1         | Choose uni-channel working<br>model            |
| SW4                       | 0         | Choose filter1 (default)                       |
|                           | 1         | Choose filter 2                                |
| SW5、6、7、8                 | 00        | Spare, reserved                                |
| Remark :                  |           | -  |
| Ø Default state : 000000  |           |  |
| Ø Which filter to be used | is determ | ined by software according to need of debug    |